GISette
Email Newsletter

October 2004

Welcome to the tenth edition of the **MassGIS GISette**, a bi-monthly newsletter emailed to our users and partner agencies to keep them informed of data updates, GIS events, and on-going technology developments. This newsletter will not replace more focused emails that many of our users currently receive. A page on our website has been created for the GISette. There you will find back issues of the GISette and an online subscription form.

Because we see the GISette as a useful medium for disseminating information related to MassGIS and data development, I would encourage readers to forward to me updates or announcements that they would like included in the GISette. We particularly want to encourage submission of announcements concerning data development projects. As the GISette only comes out every-other-month, we will soon start posting these announcements on the MassGIS web site from where they will be "archived" in the GISette.

GIS Day at the State House

On **November 17th from 10AM to 2PM,** MassGIS will host its 6th annual GIS Day event in Great Hall at the Massachusetts State House. The event will be comprised of the three components we think were successful last year: a map gallery; live GIS project demonstrations; and a noontime speaking program.

Many public agencies will be on hand, displaying their important GIS projects in an ongoing science fair type format. Below is a partial list of this year's participants.

- Brian Cummings from the *Department of Social Services* will demonstrate the uses of mapping technology in the Delivery of Human Services.

- James Benoit from the *Town of Barnstable* will show the importance of GIS to municipalities and Delivery of Municipal GIS Maps Over the Internet.

- Dr. Shirley Griffin and her students from *Oakmont Regional High School* in Ashburnham will cover GIS in Education.

- Aleda Freeman and Saul Farber from *MassGIS* will have a live link to all of MassGIS' Web Services

- Johanna Meyer at *Massachusetts Emergency Management Agency* will demonstrate the Online Community Emergency Management Plans.

- Sylvia Hobbs from the *Department of Public Health* has been working on a Geographic Analysis of Obesity in Massachusetts.

- Bill Murray and John Gaviglio of the *State Data Center (MISER)*, will be joined by Cesar Augusto Monzon from the *US Census Bureau* to demonstrate a product called LandView risk Management that uses Census, EPA and USGS information to model risks to populations and property.

- Dan Sampson of the *Massachusetts Office of Coastal Zone Management* will display the online Massachusetts Ocean Resource Information System (MORIS).

- Steve McRae, Andy Petri, Dan Koch, and Kevin Robicheau from the *Massachusetts Department of Fish and Game and the Environmental Police* will present AreaNav, Real-time Mobile Mapping for Environmental Law Enforcement.
- Susan McGrath and Katie Moulding from the *Old Colony Planning Council* will discuss their Natural Hazards Mapping Project.

The speaking program will feature Christian Jacqz, Director of MassGIS, who will review the successes of the past year and look forward to projects under development at MassGIS. This event is our primary opportunity to educate the Legislature and the public about the importance of GIS in the administration of government at all levels and in a wide variety of circumstances. It is also a great networking opportunity for GIS users. Please join us and invite your friends, family and Legislators. Great Hall is handicap accessible and refreshments will be served. Watch our website for additional information.

Database News

Data Updates

- **DEP Wetlands (1:12,000) Data Updated** - 10/27/2004
  Data have been added and updated to the Connecticut, Deerfield, Farmington, Ipswich, Parker and Westfield watersheds. For more information, please see the Datalayer Description and, for areas with completed data development, the Status Map.

- **Hydrography (1:25,000) Layer Updated** - 10/27/2004
  A small number of attribute edits and added streams in the Cohasset area, in conjunction with surface water supply data updates, by DEP GIS Group. In addition, the layer is now distributed by Watershed tile, in shapefile format only.

- **Title 5 Layer Updated** - 10/27/04
  Many tiles were modified to reflect updates to the DEP Wetlands (1:12,000) layer. Distribution of the layer is now by the Watershed Index (previously the layer was tiled by USGS Quad panels).

- **Schools Layer Updated** - 10/25/2004
  The Schools layer, representing pre-kindergarten through secondary schools, has been updated, as of October 18, 2004. New points have been added, closed schools removed, and several attributes and locations updated. Additionally, the schools now may be grouped into five TYPE categories - Charter, Collaborative, and Special Education, along with the Public and Private school classifications that existed in the previous version of the layer.

- **New DEP 2002 Integrated List of Waters Layer** - 10/6/2004
  This layer, developed by the Mass. DEP's Division of Watershed Management, Watershed

Planning Program, represents impaired water features - rivers, lakes, and estuaries - as listed in the report, "Massachusetts Year 2002 Integrated List of Waters". "Impaired" means that a water body segment is not attaining one or more designated uses, which include Aesthetics, Agriculture, Fish Consumption, Fish - other Aquatic Life and Wildlife, Industrial Cooling, Outstanding Resource Waters, Primary Contact Recreation, Public Water Supply, Secondary Contact Recreation, and Shellfish Harvesting.

- **Bicycle Trails Layer Updated** - 9/24/2004
New linework has been added to the Bicycle Trails layer. The update also includes some attribute changes.

- **C21e Layer Updated** - 9/24/2004
DEP GIS Group has updated the Tier Classified Chapter 21E Sites datalayer. 61 sites were added, 77 sites were removed, and 10 sites had a change in status.

Online Mapping

The Areas of Critical Environmental Concern (ACEC) Program in the Department of Conservation and Recreation (DCR) has a new interactive map of the ACECs: Zooming in closer on an ACEC reveals the boundary on top of the USGS Topographic Map, and at even larger scale levels, on top of an orthophoto.

Problems Printing MassGIS Online Maps?

We've had several inquiries related to printing of MassGIS' online maps. Most of the online maps on the MassGIS Online Mapping page create a printout by first opening a new browser window with the map, title, legend and overview map laid out on the page. From this page you choose File/Print to get your printout. If you're not seeing this new print page you may need to temporarily turn off any popup blockers.

The Benefits of Downloading data through OLIVER versus FTP

There are two primary ways to download data from MassGIS. One is through the "Download Free Data" link and the other is through the OLIVER mapping program.

Downloading data through OLIVER has a number of advantages:

- data can be seen on the map before download - see if it matches your needs first.
- many layers can be downloaded at once for a small location, instead of having to download standard tile chunks one layer at a time. Downloading less data overall means a faster download time.
- .prj projection files are included, which help ArcGIS align MassGIS' NAD83 MA state plane meters data with data from other projection systems.
- .avl (for ArcView 3.x) and .lyr (for ArcGIS 8 or 9) symbolization files are included - instead of coloring the data manually, use our standard legends.
- naming conventions of the shapefiles match SDE layer names, which are the names for data on any MassGIS CD product.

Disadvantages:

- OLIVER currently will only download vector (non-image) layers, but image download will be available soon.
- Only shapefiles are available. If .e00 (ArcIMS interchange files) are needed, keep using the download.htm page.

New Imagery for Government Use

Pictometry is now available to all government agencies in Massachusetts. Pictometry's oblique imagery differs from existing MassGIS orthogonal imagery in that the airplane's camera does not shoot straight down, rather it collects data at angles. This imagery is very useful for those with assets in the field, which can be viewed remotely. Measurements can be taken in three dimensions and the imagery can be marked up with annotation layers.

The Executive Office of Transportation has a liberal distribution contract with Pictometry International that allows for data and software distribution to all subdivisions of government in Massachusetts. However, distribution to entities beyond government is prohibited. Staff from all State agencies, except MassHighway, interested in this imagery should contact Paul Nutting at MassGIS. MassHighway staff should contact Mark Berger. Any municipality desiring the imagery data and software should contact the GIS Staff at their regional planning agency (RPA). You should be aware that, depending on the area for which you want imagery, the data storage requirements can be substantial (the statewide imagery requires a little over 1 terabyte of disk space). Also, there is only limited free training available for learning how to use the software. Some of the RPAs are offering training and other Pictometry-related services.

Open Space Corner

Greetings Open Space Users!

Good news and bad news in OpenSpace. The good news is that the Phase I OpenSpace rollout proceeded internally for state agency OpenSpace editors. The bad news is that we had several glitches that have since been, for the most part, solved. We are now entering new state acquisitions into OpenSpace. The delay forced a push back of the public rollout due to the extra work involved with renovating the website, data viewers and mapping routines. I am working furiously on it, but it is a monumental task so please bear with me!

There are several aspects of data cleaning that I have been performing upon the data to improve the overall quality of it. I have visited every fee_owner field (some 30,000) in an effort to clean up typos and defunct names and also standardized the abbreviations used in OpenSpace. The Symbolization has been altered to reflect the changes made to the data model, such as Land Trust being a separate ownership status distinct from Private Non-Profit. I am also moving all OpenSpace to fit the new Legislated Survey Town Bounds. This is another large task that can occur in parallel to editing due to the use of versioned editing.

Open Space Attribute Focus: Assessor's Information

The fields that are considered Assessor's Information are ASSESS_ACRES, ASSESS_MAP, ASSESS_BLOCK, ASSESS_LOT, and ASSESS_SUBLOT. These fields are fairly self-explanatory. The acreage is the size of the lot according to the local assessor. This value can differ from the calculated GIS_ACRES or the DEED_ACRES and is therefore a distinct field. The other four fields are an attempt to harness the inherent heterogeneity that is seen in assessor's parcel nomenclature across the Commonwealth. Most towns use the Map-Lot method of identifying parcels—map number corresponds to one of many physical map sheets that tile the town and lot number is the unique number of the parcel on that particular map. Over time, some parcels are subdivided and sometimes not given new lot numbers, but sublot numbers (e.g. Parcel 14 of a total of 143 parcels on map X was split into 3 lots called 14-1, 14-2 and 14-3 rather than 14, 144 and 145 or 144, 145 and 146). These are called sublots. Many of the more developed cities and towns have many parcels on a single map sheet, so to make things easier they break a sheet into blocks where each block can have it's own unique lot numbering. This lets one map have a dozen lot 14s in 12 different blocks rather than having extraordinarily large lot numbers. In towns that don't follow any of the above labeling schemes, they have been arbitrarily fit into some form of the OpenSpace Map/Block/Lot/Sublot format.

With the advent of MassGIS Standards for Digital Parcels, there is a new unique spatial ID for all parcels statewide based on the physical location of the parcels centroid. This is called LOC_ID and has been incorporated into the new OpenSpace data model to facilitate towns linking OpenSpace to their digital parcels.

If you have seen parcels in OpenSpace that have no or incorrect site names, please notify me with the correct information (please include the unique OS_ID or TOWN_ID, POLY_ID).

Keep those updates coming and get out and see some real Autumnal OpenSpace!
Scott Costello, MassGIS Open Space Coordinator, scott.costello@state.ma.us, 617-626-1076.

Events, Meetings, and Staff News

MassGIS Staff Departures

> **Janice Stone** left MassGIS in June for a position as the Conservation Agent with the Town of South Hadley. (We'd like to apologize to Janice for not including this announcement in the last GISette.) Janice spent about four years at MassGIS as a photo interpreter. During her time at MassGIS, Janice used color infrared and color photography to photo-interpret and delineate vegetative communities in Massachusetts (see http://www.mass.gov/mgis/natveg.htm for more on Janice's work). Janice made a significant and valuable contribution to the data distributed by MassGIS.

Jennifer Inzana left MassGIS in October for a position with the [Office of Transportation Planning in the Executive Office of Transportation](). Some of you may know Jennifer as the person who handled orders for site maps and for large format maps; she certainly made that part of the MassGIS operation run smoothly during her three years at MassGIS. Less well known is Jennifer's work on the recently released new town boundary data layer (see http://www.mass.gov/mgis/townssurvey.htm for more information). This was a long project that has probably left Jennifer with more obscure knowledge about the quirks of city/town boundaries than she cares to remember!

MassGIS staff extends sincere best wishes to both Janice and Jennifer in their new positions.

Meeting

[Massachusetts Geographic Information Advisory Committee]() - November 30th, 12:30-2PM, Massachusetts Emergency Management Agency Facility-Framingham

Events

GIS Day at the State House Great Hall 10-2 November 17th, 2004. PLEASE plan on attending.

Any comments or suggestions about the GISette are welcomed paul.nutting@state.ma.us

MassGIS-The Commonwealth's Office of Geographic and Environmental Information is located within the Executive Office of Environmental Affairs and is charged with the collection, enhancement, storage and dissemination of the Commonwealth's geographic data.

PLEASE NOTE THAT ALTHOUGH OUR PHYSICAL LOCATION IS THE SAME, WE HAVE A NEW *MAILING* ADDRESS

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